



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/577,546	09/11/2006	Knud Raun	PATRADE	2262
7590		01/02/2008	EXAMINER	
James C Wray Suite 300 1493 Chain Bridge Road McLean, VA 22101		KELLEHER, WILLIAM J		
		ART UNIT	PAPER NUMBER	
		3673		
		MAIL DATE	DELIVERY MODE	
		01/02/2008	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/577,546	Applicant(s) RAUN, KNUD	
	Examiner Bill Kelleher	Art Unit 3673	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 April 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claims 8-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 8 and 9 recite structural limitations directed towards a driving unit and means for connecting a driving unit to the frame claimed in claims 1-7. However, no driving unit is positively recited in Claims 1-7. Claim 7 recites that the frame be adapted for mounting a driving unit. The term "adapted for mounting" in Claim 7 is interpreted as intended use language. The recitation in claim 8 of "means provided below the hooks on the end section concerned and below the transverse bar on the driving unit..." is unclear to the Examiner.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3, 5, and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith (U.S. Patent 5,235,712) in view of Williamson (U.S. Patent 6,006,376).

Regarding Claims 1 and 2, Smith (Figure 8) discloses an apparatus for hoisting and transporting a disabled person capable of being in an upright sitting position, where said apparatus includes a frame supported by swiveling wheels (63), the frame including a substantially horizontally extending top section provided with substantially vertically extending end sections extending downwards at opposite ends of the top section, respectively, where both the top section and both end sections are constructed as frames having spaced apart but parallel frame members where the apparatus is arranged with a hoisting mechanism (25', 66, 21', 22', 31', 32') for supporting and hoisting the disabled person in a sling seat in the space under the top section and between the end sections of the frame, and that most of the space from a base and upwards under the top section and between the end sections is accessible from at least one side of the frame. Smith does not disclose that the top section of the frame is extendible in a horizontal direction in such a way that the distance between the end sections can be adjusted. Williamson, however, discloses a telescoping adjustable frame for increasing the length of a hoisting mechanism. One of ordinary skill in the art would have recognized that beds come in different sizes and making a hoist adjustable in length could make a single hoisting device accommodate various size mattresses. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the

invention to add a telescoping length adjusting mechanism to Smith to accommodate various size beds.

Regarding Claim 3, Williamson discloses "According to yet another preferred embodiment of the invention, the frame assembly conversion means includes first and second linear actuators attached to the frame assembly for moving the frame assembly between the open and closed conditions." One of ordinary skill in the art would have recognized that a linear actuator removes the need for a manual conversion. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to add a linear actuator to Smith as modified to make the length adjustment easier.

Regarding Claim 5, Smith as modified discloses the apparatus according to Claim 1, wherein the hoisting mechanism is constituted by two lifting arms (31' and 32' of Smith are considered lifting arms) that are pivotably mounted at the top section of the frame (Smith's 31' and 32' are capable of pivoting laterally about 21' and 22'), and where each lifting arm is arranged with an actuator between the arm and an adjacent end section of the frame. The Examiner is broadly interpreting an actuator to be anything that supplies or transmits a force from one mechanical component to another. The structure that is shown in Figure 8 of Smith (for example where 21' meets 31' that resembles a pulley) is considered an actuator because it is transferring a horizontal force on 31' (between 21' and 66) to a vertical force (between 21' and 33'). Furthermore, the structure that resembles a pulley is shown to extend between the support arms and the respective end sections of the frame.

Regarding Claim 7, Smith as modified is capable of having a detachable battery-powered driving unit with wheels attached to it and is therefore considered adapted for mounting a detachable, battery-powered driving unit with drive wheels.

3. Claims 4 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith in view of Williamson as applied to claims 3 and 5 above, and further in view of Dunn (U.S. Patent 5,845,348).

Smith as modified does not disclose rechargeable batteries. Smith as modified does however disclose actuators as described above. Smith as modified also discloses both actuators of claim 5 being driven by one motor (via rotation of 66 of Smith). Dunn discloses using a rechargeable battery at the end of a hoist. One of ordinary skill in the art would have recognized that rechargeable batteries remove the need for wires that could be tripped over and cause a safety hazard. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use rechargeable batteries to power Smith as modified in order to remove the need for a wired connection to a wall.

4. Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith in view of Williamson as applied to claim 7 above, and further in view of Du-Bois (U.S. Patent 5,509,159). Smith as modified does not disclose a pair of hooks and attachment means below the hooks. Du-Bois, however, discloses a patient transferring device that uses a pair of hooks (17 and 18 of Du-Bois) at one end, and other attachment means (19 and 22 of Du-Bois) at the other end for connecting transverse bars of an auxiliary member. One of ordinary skill in the art would have recognized that

attachment means such as Du-Bois' could be added to Smith as modified for attaching auxiliary members. This modification would not change the predictable established functions of either the patient hoist of Smith as modified or the attachment means of Du-Bois. Furthermore, this combination is capable of receiving transverse bars of a driving unit. The Examiner also notes 19 and 20 of Du-Bois are spring biased due to an energized spring. The male end is considered the transverse bar of an auxiliary member and the female portion is considered the portion that receives the transverse member.

5. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Smith in view of Williamson as applied to claim 1 above, and further in view of Elmick (U.S. Patent 2,035,116) Smith as modified does not disclose a bend in each end section. Elmick, however, discloses a bend (at the top of each end section) which is offset from the wheels below. One of ordinary skill in the art would have recognized that combining the top and end portions of Smith as modified to have such a bend would lower the costs of Smith as modified by requiring less mechanical parts. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have a bend such as Elmick's to reduce the costs of manufacturing.

Conclusion

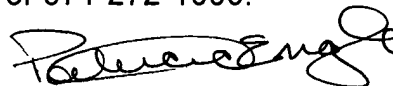
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bill Kelleher whose telephone number is (571)-272-7753. The examiner can normally be reached on Monday - Friday 8:30am - 5:00pm.

Application/Control Number:
10/577,546
Art Unit: 3673

Page 7

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patricia Engle can be reached on (571)-272-6660. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Patricia Engle
Supervisory Patent Examiner
Art Unit 3673

BK

12/14/07